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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,472	09/22/2003	Walter Beck	10191/3280	2949
26646 7	590 08/12/2005		EXAMINER	
KENYON & ONE BROAD		CLEVELAND, MICHAEL B		
NEW YORK, NY 10004			ART UNIT	PAPER NUMBER
			1762 ·	
			DATE MAIL ED: 08/12/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Autieur Occurrence	10/668,472	BECK ET AL.				
Office Action Summary	Examiner	Art Unit				
	Michael Cleveland	1762				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence ad	Idress			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	66(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days illia pply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered time the mailing date of this c O (35 U.S.C. § 133).	ly. ommunication.			
Status						
 1) ⊠ Responsive to communication(s) filed on <u>02 Margon</u> 2a) ⊠ This action is FINAL. 2b) ☐ This 3) ☐ Since this application is in condition for allowar closed in accordance with the practice under Expression in the practice of the practice of	action is non-final. nce except for formal matters, pro		e merits is			
Disposition of Claims						
5)☐ Claim(s) is/are allowed. 6)☑ Claim(s) <u>1-8</u> is/are rejected. 7)☐ Claim(s) is/are objected to.	4a) Of the above claim(s) is/are withdrawn from consideration. ☐ Claim(s) is/are allowed. ☐ Claim(s) 1-8 is/are rejected. ☐ Claim(s) is/are objected to.					
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	epted or b) objected to by the liderawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). lected to. See 37 C				
Priority under 35 U.S.C. § 119	·					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
Attachment(c)						
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>092203</u> .	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal F 6) Other:	ate	O-152)			

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DETAILED ACTION

Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the first paragraph of 35 U.S.C. 112:
 - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 2. Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no clear support for the new limitations that the coating of the electrically highly conductive first metal is structured as a printed circuit board. Applicant states that support is found at p. 2, lines 10-12. While this passage fairly indicates that the first metal does not unifromly cover the surface, there is not sufficient disclosure to indicate that the first metal is necessarily structured as a printed circuit board.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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5. Claims 1 and 3-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (U.S. Patent 6,406,939, hereafter '939).

Claims 1 and 6: '939 teaches an example which teaches

a method for producing a conductive coating on a dielectric (i.e., insulating) substrate 9col. 3, lines 43-53, comprising:

equipping, in selected regions, at least one surface of an electrically insulating substrate (401) with a coating of an electrically highly conductive first metal (402), the coating being structured as a printed circuit board;

cleaning the at least one coated surface (col. 6, lines 42-46);

seeding the coating with seeds of a second metal (Ni) and then depositing a layer including an alloy (Ni-P) of the second metal onto the coating seeded with the seeds of the second metal via electroless plating (col. 6, lines 50-55).

'939 does not explicitly teach that this substrate is subjected to firing. However, the examiner takes Official Notice that it is well known in the art of printed circuit components to fire components to bond them to one another after formation of the components. See, e.g., '939 col. 8, lines 34-40. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have bonded the product of Example 2 to another substrate via a firing process because it is well known in the art to use such processes in order to join printed circuit components together.

Claim 3: The electrolessly plated metal may include palladium alloys (col. 4, lines 6-11).

Claims 4-5 and 7-8: Regarding the composition of the alloy, it has been held that "differences in concentration or temperature will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical." (MPEP 2144.05.II.A.)

- 6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin '939 as applied to claim 1 above, and further in view of Zuniga-Ortiz et al. (U.S. Patent Application Publication 2003/0080392, hereafter '392).
- 7. '939 is discussed above. It teaches that the substrate may be a ceramic (col. 4, line 63-col. 5, line 2), but does not teach that the first metal includes silver. However, silver is a well

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known material for terminal bonding pads. See, e.g., '392, claim 23. therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a terminal pad including silver as the particular terminal pad of '939 with a reasonable expectation of success because '392 teaches that silver is a suitbale material for terminal pads. The selection of something based on its known suitability for its intended use has been held to support a *prima facie* case of obviousness. *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945).

Response to Arguments

8. Applicant's arguments, filed 5/2/2005, with respect to the rejection(s) of claim(s) 1-8 under 35 USC 103 and 35 USC 112, 2nd paragraph have been fully considered and are persuasive in view of Applicant's amendments. Therefore, the rejections have been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Lin '939.

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Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Brown (U.S. Patent 5,891,606), Lin (U.S. Patent 6,652,170), Yokono et al. (U.S.

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Patent 5,300,735), and Robinson et al. (U.S. Patent 6,054,172) are cited of interest for their teachings regarding electroless plating in the provision of printed circuit boards.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Cleveland whose telephone number is (571) 272-1418. The examiner can normally be reached on Monday-Thursday, 7-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael Cleveland Primary Examiner Art Unit 1762

8/5/2005